

INSTALLING CFL LIGHTING

Did you know lighting consumes 10 - 15% of electricity in the average household? CFLs (compact fluorescent light) bulbs are energy saving bulbs that replace standard incandescent light bulbs and use up to 75% less electricity while still emitting equal amounts of light. CFLs last up to 10 times longer than an incandescent bulb- in fact, a CFL installed today may last as long as 7 years. CFLs give off 75% less heat, which can help reduce cooling costs and come in a wide variety of styles, shapes, and wattages to suit most of your home's lighting needs.

Energy Savings Breakdown:

Energy savings/year: 1,168 kWh
Initial cost: \$25 for 18 bulbs

D14 labor: 2 hours

CO2 reduction: 2,336 pounds

<u>CO2 reduction</u>: 2,336 pounds <u>Cost savings/year</u>: \$117 Energy source: Electricity

Not only is installing CFLs a quick and easy process, by switching to CFLs you will also significantly reduce your lighting energy costs.

Steps for installing a CFL in your home:

- 1. Before purchasing CFLs at your local hardware store, take a tour through your house and count the number of light sockets. You can either buy CFLs for each light socket, or you can choose to replace your most commonly used standard light bulbs. Commonly used light bulbs are generally in kitchens, living rooms, hallways, and bathrooms. Take note of the varieties and styles so you can properly match your lighting needs.
- 2. At the hardware, lighting, or home centers you will notice the variety of CFLs available. Based upon personal preference, you will need to choose between warm (2700K), cool (3500 4100K), and bright (5000K) shades as well as different shapes and sizes. If you have a dimmable switch in your house and are replacing the corresponding light bulb, then be sure to buy a dimmable CFL for that light socket. Non-dimmable CFLs will not dim properly in dimmable fixtures. Be sure to choose Energy Star rated CFLs as these are thoroughly tested to ensure a quality product.
- 3. Installation of a CFL is just like the installation of an incandescent bulb. Unscrew the incandescent bulb counter clock-wise and put it aside. Remove the CFL from its package and screw it into the light socket in a clock-wise direction.
- 4. Repeat the process until every CFL has been installed.

NOTE: You will notice that the wattage for CFLs varies greatly from the wattage of incandescent bulbs. Follow this chart for guidance in replacing the CFL with the correct wattage.

Incandescent Light Bulbs	Minimum Light Output	Energy Star CFL Bulbs
Watts	Lumens	Watts
40	450	9-13
60	800	13-15
75	1,100	18-25
100	1,600	23-30
150	2,600	30-52

Getting the most out of your CFL

CFLs require a break in period ranging from
 1-2 hours. This will allow the phosphorous and

mercury vapor (less than 4mg) to fully activate and also enhances the color of the emitted light. CFL warm up times can vary between bulbs. If you are not happy with a certain brand, try another or read reviews online.

- To maximize the lifetime savings and effectiveness of your CFL, keep it turned on continuously for increments
 of 15 minutes or more.
- For the indoors, install the CFL in open fixtures when possible. Installing a CFL in a closed fixture is fine however,
 it creates a hot environment, which can reduce the CFL's lifetime.
- For the outdoors, install the CFL in an enclosed fixture when possible. This will allow trapped heat to help your CFL come to full brightness much quicker in cold environs. Check the packaging for optimal operating temperatures.

CFL Recycling

- CFLs contain a trace amount of mercury; therefore they cannot be disposed of in the trash. Visit this
 website to find out how to properly clean up a broken bulb:
 http://www.energystar.gov/ia/partners/promotions/change_light/downloads/Fact_Sheet_Mercury.pdf
- Please recycle your used CFLs at one of the following locations for free:
 - ✓ City of Flagstaff Hazardous Product Center: 6770 East Landfill Rd
 - ✓ HomCo Hardware and Lumber: 1763 E Butler Ave
 - ✓ Home Depot: 1325 W Rte 66 and 5005 E Marketplace Dr #110
 - ✓ Hunts Building Center: 2711 E Lakin Dr
 - The Lite Company: 2109 N 4th St





Materials are covered by manufacturers' warranties only. Please follow manufacturers' instructions for the use of any particular product. The City of Flagstaff is not liable for any damages, injury, or expense incurred in connection with this program.